



UNITED STATES PATENT AND TRADEMARK OFFICE

Handwritten initials

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/920,583	07/31/2001	L. Jeffrey Kapner III	K35A0795	5991
------------	------------	-----------------------	----------	------

26332 7590 09/27/2005

WESTERN DIGITAL CORP.
20511 LAKE FOREST DRIVE
C205 - INTELLECTUAL PROPERTY DEPARTMENT
LAKE FOREST, CA 92630

EXAMINER

CHOWDHURY, SUMAIYA A

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/920,583	Applicant(s) KAPNER ET AL.	
	Examiner Sumaiya A. Chowdhury	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-52 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-52 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

1. Claim 11 is objected to because of the following informalities:

In claim 11, line 2, "entry on a" should be changed to --entry of a--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 45, 46, & 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikinis (US 2003/0023980).

As for claim 45, Kikinis discloses a client terminal (500 – Fig. 5) connectable to a video distribution system (519 – Fig. 5) and a display device (518 – Fig. 5), the video distribution system provides promotion information to create a promotion display that advertises a bundle of channels, the client terminal comprising:

Art Unit: 2611

a video distribution system interface (516 – Fig. 5) to receive the promotion information (The STB receives promotion information/ packages from the service provider via 516 – Fig. 1 - paragraph [0021], [0031], [0036], [0037]);

a display interface (510 – Fig. 5) to display a promotion display for a bundle of channels on the display device (paragraph [0038], [0021], [0031]);

a user interface (520 – Fig. 5) to receive user input (paragraph [0038]); and

a terminal controller responsive to a subscription control program for:

- a. in response to user input, selecting a promotion display for a bundle of channels –paragraph [0021]; and
- b. transmitting a subscription request for the selected bundle of channels to the video distribution system –paragraph [0022].

As for claim 46, Kikinis discloses wherein the client terminal further comprises a preference engine (use-tracking program), wherein the preference engine selects a promotion display for a bundle of channels for display on the display device based upon a user's viewing patterns - paragraph [0021], [0031]-[0033].

As for claim 50, Kikinis discloses wherein the client terminal is coupled to the video distribution system by a link that provides a persistent connection (wires, cables, optical fibers, paragraph [0037]).

Claim Rejections - 35 USC § 103

Art Unit: 2611

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-6, 8-13, 15-18, 21-26, 28-31, 34-39, and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (5822123) in view of LaRocca (6314572).

As for claims 1 and 26, Davis discloses a client terminal (Fig. 1) connectable to a video distribution system (col. 9, lines 11-20) and a display device (27 – Fig. 1), the video distribution system provides program guide information to create a program guide that includes program guide entries for subscribed channels and non-subscribed channels, the client terminal comprising:

a video distribution system interface (11 – Fig. 1) to receive the program guide information - col. 9, lines 8-20;

a display interface (23 or 26 – Fig. 1 and 27 – Fig. 1) to display the program guide on the display device - col. 11, lines 9-16, col. 9, lines 14-21;

a user interface (29 – Fig. 1) to receive user input - col. 12, lines 4-10; and

a terminal controller (16 – Fig. 1) responsive to a subscription control program for:

- a. in response to user input, selecting a program guide entry from the program guide (col. 20, lines 9-11, lines 25-34, lines 49-54);

However, Davis fails to disclose wherein

- b. if the selected program guide entry is for a non-subscribed channel
 - i. selecting a bundle of channels based upon a subscription matrix for the user, the selected program guide entry, and available bundles of channels for subscription.
 - ii. transmitting a subscription request for the selected bundle of channels to the video distribution system

In an analogous art, LaRocca discloses:

- b. if the selected program guide entry is for a non-subscribed channel (col. 11, lines 25-30, lines 35-39, col. 10, lines 7-11),
 - i. selecting a bundle of channels based upon a subscription matrix (col. 5, lines 29-41) for the user, the selected program guide entry, and available bundles of channels for subscription (The subsystems 142 – Fig. 1 and 144 – Fig. 1 maintain databases of specific customer subscription information (subscription matrix) which is used to facilitate dependent subscriptions - col. 5, lines 29-41. Therefore, if the user selects M subscriptions out of N services, the subscriber is provided the remaining services for free or at a discounted rate. It tracks the subscriptions of each subscriber and when a certain number is obtained in a category, the remaining services are available for free or for a discounted fee – col. 13, lines 16-28. e.g. User selects children's programming (selected program guide entry). The remaining children's

programming services (available bundle of channels for subscription) are made available for free or for a discounted fee. The remaining children's programming services are determined from the specific customer subscription information (subscription matrix). When the subscriber subscribes to dependent subscriptions, the system allows the subscriptions to be bundled into fixed packages containing a plurality of services for the advantage of providing programs to the user for free or at a discounted rate - col. 13, lines 16-27); and

- ii. transmitting a subscription request for the selected bundle of channels to the video distribution system (The subscription information screen allows user to sign up for service. The subscription information screen may inform the user that service requested is a dependent service, implying that user may sign up for a bundle of channels - col. 11, lines 35-67).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's system to include :

- b. if the selected program guide entry is for a non-subscribed channel
 - i. selecting a bundle of channels based upon a subscription matrix for the user, the selected program guide entry, and available bundles of channels for subscription.
 - ii. transmitting a subscription request for the selected bundle of

channels to the video distribution system, as taught by LaRocca, for the advantage of providing programs for free or at a discounted rate – col. 13, lines 16-24.

As for claims 3, 15, 28, and 41, LaRocca and Davis disclose wherein the video distribution system after receipt of the subscription request for the selected bundle of channels verifies a user's credit with a billing system to determine whether the user's credit is approved or disapproved for the selected bundle of channels, the terminal controller or video distribution controller responsive to the subscription control program/further comprising code segments or steps for :

In particular, LaRocca discloses:

a. receiving the approval or disapproval from the video distribution system (col. 12, lines 1-14); and

b. if the user's credit is approved,

i. updating the subscription matrix (subscription database) to reflect that the client terminal is now subscribed to the selected bundle of channels (col. 12, lines 9-22); and

ii. authorizing access to the selected bundle of channels (col. 12, lines 21-25).

As for claims 4, 16, and 29, Davis and LaRocca disclose wherein the subscription matrix is stored both locally at the client terminal and remotely at the video

Art Unit: 2611

distribution system. In particular, Davis discloses wherein initially the microcontroller stores the subscription ordering information (subscription matrix) in a location in memory in the settop box. The subscription information can then be transmitted to the cable operator which is located remotely at the video distribution system – col. 20, lines 49-54.

As for claims 5, 17, 30, and 43, Davis fails to disclose wherein the subscription matrix includes a client terminal I.D. designating the associated client terminal, channels subscribed to by the client terminal, and available channels not subscribed to by the client terminal.

In an analogous art, LaRocca discloses wherein the program identification codes for the channels subscribed to by the subscriber and terminal I.D are stored in the subscription database (subscription matrix) such that the subscriber can access their personal SOD service at any time– col. 13, lines 9-12. The subscription database contains customer specific information storing which type of service the subscriber is/not subscribed to enable the system to accurately control system access, and subscriber billing, and to facilitate dependent subscriptions. – col. 5, lines 29-40.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's system to include wherein the subscription matrix includes a client terminal I.D. designating the associated client terminal, channels subscribed to by the client terminal, and available channels not subscribed to by the client terminal, as taught by LaRocca, for the advantage of allowing the subscriber to

Art Unit: 2611

access their personal SOD service at any time and for enabling the system to accurately control system access, and subscriber and billing, and to facilitate dependent subscriptions.

As for claims 6, 18, 31, and 44, LaRocca and Davis disclose wherein the selected bundle of channels is the most cost effective bundle of channels having a subscription cost that is less than the subscription cost of individually subscribing to the non-subscribed channel. In particular, LaRocca discloses wherein the subscriber subscribes to dependent subscriptions, the system allows the subscriptions to be bundled into fixed packages wherein several of the services is provided for free or at a discounted rate - col. 13, lines 16-27

As for claims 8, 21, and 34, LaRocca and Davis disclose wherein the client terminal is coupled to the video distribution system by a link that provides a persistent connection. In particular, Davis discloses that the client terminal receives data from the video distribution system via cablecast which is a persistent connection - cablecast, cable line – col. 9, lines 12-16, lines 20-22.

As for claims 9, 22, and 35, Davis fails to disclose wherein a channel includes a tier of channels.

In an analogous art, LaRocca discloses wherein the menu (500 – Fig. 5) includes a category for each listed channel (502 – Fig. 5) - col. 10, lines 29-45.

Art Unit: 2611

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's system to include wherein a channel includes a tier of channels, as taught by LaRocca, for the advantage of grouping channels into their respective categories to provide the user the ease of finding a desired channel.

As for claims 10, 23, and 36, Davis and LaRocca discloses wherein a channel includes a computer network channel. In particular, Davis discloses wherein 64 – Fig. 6 corresponds to interactive services which require a computer network channel. e.g. home shopping, banking, or telephone use - col. 17, lines 39-44.

As for claims 11, 24, and 37, Davis and LaRocca disclose the client terminal comprising selecting only a program of the program guide entry of a non-subscribed channel for subscription in selecting the bundle of channels. In particular, LaRocca discloses wherein the client terminal selects a program of the program guide entry of a non-subscribed channel for subscription in selecting the bundle of channels. e.g. Referring to col. 12 lines 38-65, a user is presented with a sports bundle. The user may only be interested in men's professional basketball and is provided the option of selecting that particular channel – col. 12, lines 58-67.

As for claims 12, 25, and 38, Davis fails to disclose wherein the client terminal wherein the video distribution system is a cable head end.

In an analogous art, LaRocca discloses wherein the video distribution system is a cable head end - col. 4, lines 63-67.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's system to include wherein the video distribution system is a cable head end, as taught by LaRocca, for the advantage of providing a secure bi-directional flow of data between the client terminal and cable headend.

Claim 13 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. Claim 13 additionally calls for the following:

Davis discloses a computer program (application software) embodied in a computer readable storage medium (SRAM, EEPROM 20 – Fig. 1) for use in a client terminal (Fig. 1) connectable to a video distribution system (col. 9, lines 11-20) and a display device (27 – Fig. 1), the video distribution system provides program guide information to create a program guide that includes program guide entries for subscribed channels and non-subscribed channels, the computer program comprising code segments (software programming) to perform the method discussed above in claim 1. (The video distribution system provides program schedule information for **all (subscribed and non-subscribed)** television programs available in the operator's geographical market – col. 9, lines 8-20. The EEPROM is connected to the video distribution system through components 12-16 – Fig. 1, and is connected to the display device through 16, 23, 25A – Fig. 1. col. 9, lines 58-64).

Claim 39 contains the limitations of claim 13 and is analyzed as previously discussed with respect to that claim. Claim 39 additionally calls for the following:

LaRocca discloses wherein

the video distribution system comprising:

a video distribution system controller (142 – Fig. 1); and

a subscription matrix storage (154 – Fig. 1, col. 5, lines 29-41) to store a subscription matrix for the client terminal;

wherein, in response to user input selecting a program guide entry from the program guide for a non-subscribed channel received from the client terminal, the video distribution system controller:

selects a bundle of channels for the client terminal based upon the subscription matrix for the client terminal, the selected program guide entry, and available bundles of channels for subscription (col. 5, lines 29-41, col. 13, lines 16-28, col. 11, lines 25-67).

As for claim 42, Davis fails to disclose wherein the video distribution system controller updates a subscription matrix located at the client terminal such that the client terminal authorizes access to the selected bundle of channels.

In an analogous art, LaRocca discloses wherein after the network manager (video distribution system controller) updates the subscription database (subscription matrix), the system provides the new subscriber of the service to utilize the newly

Art Unit: 2611

subscribed service, hence the subscription matrix at the client terminal is updated authorizing access to the newly subscribed service and updating the system's billing system— col. 12, lines 10-25

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's system to include wherein the video distribution system controller updates a subscription matrix located at the client terminal such that the client terminal authorizes access to the selected bundle of channels, as taught by LaRocca, for the advantage of updating authorized access to the newly subscribed service and updating the system's billing system

5. Claims 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of LaRocca.

As for claim 47, Kikinis fails to disclose wherein, the video distribution system after receipt of the subscription request for the selected bundle of channels verifies a user's credit with a billing system to determine whether the user's credit is approved or disapproved for the selected bundle of channels, the terminal controller responsive to the subscription control program for:

- a. receiving the approval or disapproval from the video distribution system; and
- b. if the user's credit is approved,
 - i. updating a subscription matrix to reflect that the client terminal is now subscribed to the selected bundle of channels; and

Art Unit: 2611

ii. authorizing access to the selected bundle of channels.

In an analogous art, LaRocca discloses:

the video distribution system after receipt of the subscription request for the selected bundle of channels verifies a user's credit with a billing system to determine whether the user's credit is approved or disapproved for the selected bundle of channels, the terminal controller responsive to the subscription control program for:

a. receiving the approval or disapproval from the video distribution system (col. 12, lines 1-14); and

b. if the user's credit is approved,

i. updating a subscription matrix (subscription database) to reflect that the client terminal is now subscribed to the selected bundle of channels (col. 12, lines 9-22); and

ii. authorizing access to the selected bundle of channels (col. 12, lines 21-25).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Kikinis's system to include steps (a)-(b)ii., as taught by LaRocca, for the advantage of providing the user access to the now subscribed bundle of channels.

As for claim 51, Kikinis fails to disclose wherein a channel includes a tier of channels.

In an analogous art, LaRocca discloses wherein the menu (500 – Fig. 5) includes a category for each listed channel (502 – Fig. 5) for categorizing channels- col. 10, lines 29-45.

Art Unit: 2611

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Kikinis's system to include wherein a channel includes a tier of channels, as taught by LaRocca, for the advantage of categorizing channels based on subject so that subscribers can select desired programs.

6. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of LaRocca as applied to claim 47 above, and further in view of Davis.

As for claim 48, Kikinis and LaRocca fail to disclose wherein the subscription matrix is stored both locally at the client terminal and remotely at the video distribution system.

In an analogous art, Davis discloses wherein initially the microcontroller stores the subscription ordering information in a location in memory in the settop box to update the local subscription matrix. The subscription information (subscription matrix) can then be transmitted to the cable operator which is located remotely at the video distribution system for billing purposes— col. 20, lines 49-54.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Kikinis and LaRocca's system to include wherein the subscription matrix is stored both locally at the client terminal and remotely at the video distribution system, as taught by Davis, for the advantage of updating the subscription matrix locally and to update the billing services remotely.

As for claim 49, LaRocca additionally discloses wherein the program identification codes for the channels subscribed to by the subscriber and terminal I.D are stored in the subscription database (subscription matrix) such that the subscriber can access their personal SOD service at any time and without further payment – col. 13, lines 9-12. The subscription database contains customer specific information storing which type of service the subscriber is/not subscribed to – col. 5, lines 29-40.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the combination of Kikinis, LaRocca, and Davis's system to include wherein the subscription matrix includes a client terminal I.D. designating the associated client terminal, channels subscribed to by the client terminal, and available channels not subscribed to by the client terminal, as further taught by LaRocca, for the advantage of enabling the system to accurately control system access and for subscriber billing.

7. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Davis.

As for claim 52, Kikinis fails to disclose wherein a channel includes a computer network channel.

Art Unit: 2611

In an analogous art, Davis discloses wherein 64 – Fig. 6 corresponds to interactive services which require a computer network channel. e.g. home shopping, banking, or telephone use - col. 17, lines 39-44.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Kikinis's system to include wherein a channel includes a computer network channel, as taught by Davis, for the advantage of providing bi-directional services.

8. Claims 2, 14, 27, 40, 7, 20, 33, 19, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of LaRocca as applied to claims 1, 13, 26, 39, 1, 13, 26, 13, and 26, respectively, above, and further in view of Kikinis.

Claims 2, 14, 27, and 40, contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. Claims 2, 14, 27, and 40 additionally call for the following:

Selecting a bundle of channels further comprises code segments and steps for:

b. accepting user input to select a bundle of channels for subscription by the user

- col. 11, lines 35-67, col. 12, lines 58-60, col. 13, lines 30-35; and

However, Davis and LaRocca fail to disclose wherein :

a. recommending at least one bundle of channels for subscription by the user ;

In an analogous art, Kikinis discloses wherein packages (bundles) of TV

Art Unit: 2611

programming are recommended to the user for subscription based on user's past selection of programming to provide the user with recommendations of packages that the user is likely to select – paragraph [0031]-[0033], [0009].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Davis's and LaRocca's system to include recommending at least one bundle of channels for subscription by the user, as taught by Kikinis, for the advantage of providing to the user subscription recommendations which the user is likely to select.

As for claims 7, 20, and 33, LaRocca and Davis fail to disclose wherein client terminal further comprising the step/preference engine/code segments, wherein the preference engine/code segments selects program guide entries for non-subscribed channels for display in the program guide based upon a user's viewing patterns.

In an analogous art, Kikinis discloses wherein the client terminal recommends packages including programming based on customer's use-tracking program (step/preference engine/ code segments) which tracks customer's attempt to access unavailable programming (non-subscribed channels) – paragraph [0031] - [0033].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify LaRocca and Davis's system to include wherein client terminal further comprising a preference engine, wherein the preference engine/code segments selects program guide entries for non-subscribed channels for display in the program guide based upon a user's viewing patterns, as taught by Kikinis, for the

Art Unit: 2611

advantage of providing recommendations of channels which the user is likely to select based on user's past selections.

As for claim 19, Davis and LaRocca disclose wherein the computer program further comprises code segments/steps for:

c. transmitting a subscription request for the bundle of channels to the video distribution system as discussed above.

However, they both fail to disclose:

- a. displaying a promotion display for a bundle of channels.
- b. in response to user input, selecting the promotion display; and

In an analogous art, Kikinis discloses:

a. displaying a promotion display for a bundle of channels – paragraph [0021], [0031].

b. in response to user input, selecting the promotion display – paragraph [0022];
and

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify LaRocca and Davis's system to include displaying a promotion display for a bundle of channels and in response to user input, selecting the promotion display, as taught by Kikinis, for the advantage of providing the user with programming which has better features over other packages.

Claim 32 contains the limitations of claim 45 and is analyzed as previously discussed with respect to that claim.

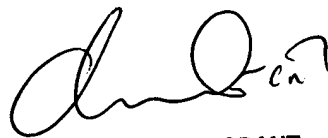
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC

A handwritten signature in black ink, appearing to read "Chris Grant", with a stylized flourish at the end.

**CHRISTOPHER GRANT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**